

Application No.: 09/470,284

Docket No.: M4065.0812/P812

REMARKS

Claims 1-9, 11-17, 26, 28, 29, 31, 52-56, and 61-63 are pending. Applicant reserves the right to pursue original and other claims in this and other applications.

Claims 62 and 63 stand rejected under 35 U.S.C. 112, 2nd paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 62 and 63 recite, *inter alia*, "said mounting structure is adapted to removably connect the prefabricated lens system to the plate above the lensing structure." These claims depend from claims 28 and 52, respectively, and add to the recited matter of claims 28 and 52 that the mounting structure "adapted to removably connect..." (emphasis added.) There is nothing unclear about the limitation recited in claims 62 and 63, it is a specific structural limitation on the previously recited method which uses the mounting structure.

Claims 62 and 63 stand rejected under 35 U.S.C. 101 because "the claimed recitation of a use, without setting forth any steps involved in the process, results in an improper definition of a process."

As indicated above, claims 62 and 63 respectively only add a single limitation to the type of mounting structure being used. As such, applicant suggests that the limitations are proper. The claims recite a method employing a mounting structure which is adapted to removably connect the prefabricated lens system to the plate above the lensing structure.

Claims 1-6, 11-13, 28, 31, 52-54, and 61 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Pat. No. 6,130,448 to Bauer ("Bauer") in view of U.S.

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Pat. No. 5,821,532 to Beaman et al. ("Beaman") Reconsideration of this rejection respectfully is requested.

Claim 1 recites a "cover for an image sensor array" comprising "a plate formed of substantially transparent material and secured adjacent to an upper surface of and covering the image sensor array." The sensor array is "sealed by said plate," and the plate has "a plurality of surfaces forming a lensing structure." At least one of the plurality of surfaces is "contoured into a lensing surface capable of changing imaging characteristics." The cover also includes "a mounting structure extending from an upper surface of the plate and adapted to secure a prefabricated lens system to the plate above the lensing structure."

Bauer discloses a cover plate with a lens. The Office Action admits that Bauer does not disclose a cover that also includes "a mounting structure extending from an upper surface of the plate and adapted to secure a prefabricated lens system to the plate above the lensing structure."

The Office Action cites Beaman as supplying a mounting structure 60 extending from an upper surface of plate 25 and adapted to secure a prefabricated lens system to the plate about the lensing structure.

Applicant respectfully disagrees. Beaman al. does not teach or suggest "a mounting structure extending from an upper surface of the plate and adapted to secure a prefabricated lens system to the plate above the lensing structure." Instead, the "mounting structure 60" discussed in the Office Action, referred to in Beaman as the lens arrangement 62, is "a prefabricated lens system." Beaman does not disclose a separate "mounting structure." More specifically, referring to FIG. 6, lens arrangement 62 is combined with the optics assembly 40. See col. 3, lines 62-64. Beaman does not

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disclose "a mounting structure extending from an upper surface of the plate and adapted to secure a prefabricated lens system to the plate above the lensing structure." (emphasis added)

Additionally, there is no motivation or suggestion in either Bauer or Beaman to combine them to form or achieve the claimed invention.

Further, Applicant respectfully urges that Bauer and Beaman can not properly be combined as proposed in the Office Action to obtain the invention of claim

1. As discussed above, neither Bauer nor Beaman discloses "a mounting structure extending from an upper surface of the plate." Further, Beaman discloses that lens arrangement 62 is combined with the optics assembly 40. The arrangement is advantageously smaller and has fewer interfaces than the prior art arrangement of Beaman's FIG. 5, in which lens assembly 52 appears mounted directly to lens cover 57. See col. 3, lines 56-65. Thus, rather than suggesting "a mounting structure extending from an upper surface of the plate," Beaman teaches away from mounting lens assembly 52 to lens cover 57. Additionally, the arrangement is advantageously smaller and has fewer interfaces than the prior art arrangement of Beaman's FIG. 6, in which lens assembly 62 appears mounted directly to lens cover 25. Thus, rather than suggesting "a mounting structure extending from an upper surface of the plate," Beaman teaches away from mounting lens assembly 62 to lens cover 25.

Claim 1 is patentable over the proposed combination of Bauer in view of Beaman. Claims 2-13 depend directly or indirectly from claim 1 and are patentable over Bauer in view of Beaman for at least the same reasons.

Claim 61 depends from claim 1 and is patentably for at least that reason. Furthermore, neither Beaman or Bauer, either separately or in combination disclose the

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claimed invention including the limitation of "the mounting structure extending from the upper surface of the plate is adapted to removably secure the prefabricated lens system to the plate above the lensing structure." As such, the rejection of claim 61 should be withdrawn.

Claim 28 recites a method of making "an image sensor array having a lensing cover plate." The method comprises, inter alia, "forming a lensing structure on a lensing surface of a flat, substantially transparent cover plate by contouring said lensing surface of the cover plate into a lensing element to form said lensing cover plate," and "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate above the lensing structure."

Bauer discloses a method of making an imager having a cover plate with a lens. The Office Action admits that Bauer does not disclose "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate above the lensing structure."

The Office Action cites Beaman to supply what is missing, asserting that Beaman discloses a mounting structure 60 that extends from an upper surface of plate 25 that is adapted to secure a prefabricated lens system to the plate above the lensing structure. Beaman does not teach or suggest, however, a method of forming an image sensor array with a cover plate that includes "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate above the lensing structure." Beaman discloses that the lens arrangement 62 is combined with the optics assembly 40. See FIG. 6 and col. 3, lines 62-64. Beaman does not teach or suggest "securing a mounting structure to

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an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate above the lensing structure."

Additionally, there is no motivation or suggestion in either Bauer or Beaman to combine them to form the claimed invention.

Further, Applicant respectfully urges that Bauer and Beaman can not properly be combined as proposed in the Office Action to obtain the inventive method of claim 28. Applicant notes, as discussed above, that neither Bauer nor Beaman discloses "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate above the lensing structure." Further, Beaman teaches that combining the lens arrangement 62 with the optics assembly 40 provides an arrangement that is smaller and has fewer interfaces than the prior art arrangement of Beaman's FIG. 5, in which lens assembly 52 appears mounted directly to lens cover 57. See col. 3, lines 56-65. Additionally, the arrangement is advantageously smaller and has fewer interfaces than the prior art arrangement of Beaman's FIG. 6, in which lens assembly 62 appears mounted directly to lens cover 25. Thus, Beaman teaches away from, and does not suggest, a method that includes "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate above the lensing structure."

Claim 28 is patentable over the proposed combination of Bauer in view of Beaman. Claim 31 depends from claim 28 and is patentable over Bauer in view of Beaman for at least the same reasons.

Claim 62 depends from claim 28 and is patentable for at least that reason. Furthermore, neither Beaman or Bauer, either separately or in combination disclose the

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claimed invention including the limitation of "the mounting structure extending from the upper surface of the plate is adapted to removably secure the prefabricated lens system to the plate above the lensing structure." As such, the rejection of claim 62 should be withdrawn.

Claim 52 recites a method of making a camera system that comprises, inter alia, "contouring a portion of a flat cover plate to form a cover plate having a lensing structure," and "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate mounting above the lensing structure."

Bauer discloses a method of making a camera system having a cover plate that includes a lens. As admitted in the Office Action, Bauer does not disclose "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate mounting above the lensing structure."

The Office Action cites Beaman and asserts that Beaman discloses a mounting structure 60 that extends from an upper surface of plate 25 and is adapted to secure a prefabricated lens system to the plate above the lensing structure. Beaman does not teach or suggest, however, a method of forming a camera system by "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate mounting above the lensing structure." Instead, Beaman discloses that the lens arrangement 62 is combined with the optics assembly 40. See FIG. 6 and col. 3, lines 62-64.

Additionally, there is no motivation or suggestion in either Bauer or Beaman to combine them to form or achieve the claimed invention.

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Further, Applicant respectfully urges that Bauer and Beaman can not properly be combined as proposed in the Office Action to obtain the inventive method of claim 52. Neither Bauer nor Beaman discloses "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate above the lensing structure." Further, Beaman teaches that combining the lens arrangement 62 with the optics assembly 40 provides an arrangement that is smaller and has fewer interfaces than the prior art arrangement of Beaman's FIG. 5, in which lens assembly 52 appears mounted directly to lens cover 57. See col. 3, lines 56-65. Additionally, the arrangement is advantageously smaller and has fewer interfaces than the prior art arrangement of Beaman's FIG. 6, in which lens assembly 62 appears mounted directly to lens cover 25. Thus, rather than suggesting "a mounting structure extending from an upper surface of the plate," Beaman teaches away from mounting lens assembly 62 to lens cover 25. Thus, Beaman teaches away from, and does not suggest, a method that includes "securing a mounting structure to an upper surface of the plate, said mounting structure being adapted to connect a prefabricated lens system to the plate above the lensing structure."

Claim 52 is patentable over the proposed combination of Bauer and Beaman. Claims 53 and 54 depend directly from claim 52 and are patentable over Bauer and Beaman for at least the same reasons.

Claim 63 depends from claim 52 and is patentably for at least that reason. Furthermore, neither Beaman or Bauer, either separately or in combination disclose the claimed invention including the limitation of "the mounting structure extending from the upper surface of the plate is adapted to removably secure the prefabricated lens system to the plate above the lensing structure." As such, the rejection of claim 63 should be withdrawn.

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Claims 14-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Bauer in view of Beaman further in view of U.S. Pat. No. 3,620,149 to Ogihara ("Ogihara"). Reconsideration of this rejection respectfully is requested.

Claims 14-17 depend indirectly from claim 1. Claim 1 is patentable over Bauer in view of Beaman et al., as has been advanced above. Ogihara has not been cited against claim 1 and, if cited, would not cure the deficiencies of Bauer in view of Beaman. Ogihara has been cited as disclosing a threaded-type coupling for coupling a lens barrel with a camera body. Ogihara does not provide the missing feature of "a mounting structure extending from an upper surface of the plate and adapted to secure a prefabricated lens system to the plate above the lensing structure." Claim 1 and dependent claims 13-15 are patentable over the proposed combination of Bauer in view of Beaman et al., further in view of Ogihara.

Additionally, there is no motivation or suggestion in Bauer or Beaman or Ogihara to combine them to form or achieve the claimed invention.

In view of the above amendment, applicant believes the pending application is in condition for allowance.

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